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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,651	11/30/2005	Axel Nickel	007432.00001	3725

22907 7590 01/30/2009

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EXAMINER	
EWALD, MARIA VERONICA	

ART UNIT	PAPER NUMBER
1791	

MAIL DATE	DELIVERY MODE
01/30/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/538,651	NICKEL ET AL.	
	Examiner	Art Unit	
	MARIA VERONICA D. EWALD	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 December 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *3-8 and 13-19* is/are rejected.

7)☒ Claim(s) *2 and 9-12* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 June 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

13. Claims 18 – 19 are objected to because of the following informalities: as written, line 9 of claim 18 (page 4) and line 9 of claim 19 (page 4) state "…the melt from as lateral inlet via a redirecting means..." It appears that the word "as" should be "a." Appropriate correction is required.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 3 – 4, 6, 7 – 8, 14 – 16 and 18 – 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Allen, et al. (U.S. 5,445,509). With respect to claim 18, Allen, et al. teach a melt blow head comprising: a rectilinear row of nozzle bores (item 61 – figure 5) arranged in a nozzle bar (item 11 – figure 5), the nozzle bores configured to produce endless filaments formed from a melt and associated with blowing slots in the form of longitudinal slots of two slot-plates (items 43 and 44 – figure 5) for feeding blowing air at an angle to the nozzle bores to which the melt is fed through a distributor (item 60 – figure 5); wherein the nozzle bar is fixed in a defined position with respect to the slot-plates and removable therefrom in a vertical direction (column 5, lines 5 – 15); wherein

the distributor is configured to supply the melt through a feeding pipe (item 51 – figure 5), the feeding pipe being configured to lead the melt from a lateral inlet (item 23 – figure 5) via a redirecting means (item 24 – figure 5) in a longitudinal direction to the distributor (figure 5), the lateral inlet and redirecting means being housed in the nozzle bar (figure 5) and wherein the lateral inlet is connected to a melt pipe (item 17 – figure 5) through a removable connector (item 22 – figure 5).

With respect to claim 19, the reference also teaches a melt blow head comprising: a rectilinear row of nozzle bores (item 61 – figure 5) arranged in a nozzle bar (item 11 – figure 5), the nozzle bores configured to produce endless filaments formed from a melt and associated with blowing slots in the form of longitudinal slots of two slot-plates (item 43 and 44 – figure 5) for feeding blowing air at an angle to the nozzle bores to which the melt is fed through a distributor (item 60 – figure 5); wherein the nozzle bar is fixed in a defined position with respect to the slot-plates and removable therefrom in a vertical direction (column 5, lines 5 – 15); wherein the distributor is configured to supply the melt through a feeding pipe (item 51 – figure 5), the feeding pipe being configured to lead the melt from a lateral inlet (item 23 – figure 5) via a redirecting means (item 24 – figure 5) in a longitudinal direction to the distributor (figure 5), the lateral inlet and redirecting means being housed in the nozzle bar (figure 5); and wherein the lateral inlet is connected to a melt pipe (item 17 – figure 5) through a removable connector (item 22 – figure 5); and wherein no feeding pipes are positioned above the nozzle bar (figure 5).

With respect to claims 3 – 4, 6, 7 – 8 and 14 – 16, Allen, et al. also teach that the melt pipe is provided in the region of the connector with a shut-off valve (item 15 – figure 5; column 4, lines 25 – 35); wherein the melt pipe is movable with the connector with the latter removed, in relation to the inlet (figure 5; column 4, lines 25 – 35), wherein the slot-plates extend in a concave rounded section on a side opposite the nozzle bar (figures 5 – 6); wherein there is a second distributor through which melt is fed (item 29 – figure 5).

The Examiner is noting that Applicant has claimed a redirecting means. The Examiner is *not* interpreting such a means as an invocation of 35 U.S.C. 112, 6th paragraph. The Specification does not teach any specific component as a redirecting means but merely states that the melt is directed from a lateral inlet via a redirecting means in a longitudinal direction. Thus, because the reference of Allen, et al. teach a channel 24 which redirects the melt from the lateral inlet 23 to the distributor 60 longitudinally, the channel 24 is a redirecting means.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5, 13 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen, et al. in view of Allen (U.S. 6,210,141). Allen, et al. teach the characteristics

previously described but do not teach that there is a deformable seal with the connector. It is noted, that Allen, et al. do teach that the slot-plates extend in a concave rounded section on a side opposite the nozzle bar (figures 5 – 6). With respect to the use of a deformable seal, such a modification is well within the level of one of ordinary skill in the art.

In a method to produce filaments, Allen teaches the use of a modular die assembly with a quick-change die tip or nozzle. The assembly can be comprised of one unit or several units depending on the size and number of filaments being extruded (figure 1; column 9, lines 10 – 20). Furthermore, the reference teaches that O-rings may be mounted around the passages extending from the distributor or manifold (item 11 – figure 2; column 9, lines 18 – 19) into the die body. The O-rings prevent any leakage of material from the manifold, since it is known to one of ordinary skill in the art that O-rings are typically used as seals to deter leakage and/or maintain a seal where a gap or opening may occur. This suggests the use of a deformable seal with the connector.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the Applicant's invention to modify the apparatus of Allen, et al. with the O-rings of Allen, placed at the connector for the purpose of preventing any leakage of melt as the polymer is fed from the extruder or other source through the feed pipe into the distributor.

Allowable Subject Matter

16. The indicated allowability of claims 18 – 19 are withdrawn in view of reconsideration of the prior art reference of Allen, et al. Rejections as noted are discussed above.

However, claims 2 and 9 – 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: the closest prior art reference of Allen, et al. fail to teach or suggest, either alone or in combination, a melt blow head wherein the nozzle bar is laterally enclosed by air feed blocks with horizontal and vertical walls, said air feed blocks being arranged parallel to the row of nozzle bores and contacted by the nozzle bar with a step with horizontal and vertical legs, a slot-plate in contact with each air feed block against a stop leaving open a space with respect to the air feed block for supplying the blow air to the longitudinal slots. In the prior art apparatus of Allen, et al., the nozzle bar is not laterally enclosed by air feed blocks, but merely includes a manifold for the distribution of melt on one side.

Response to Arguments

17. Applicant's arguments filed December 4, 2008 have been fully considered but they are not persuasive. Though indicated as allowable in the previous office action, upon reconsideration and review of the prior art reference of Allen, et al., the Examiner has rejected claims 18 – 19 and its associated dependent claims. As noted in the

rejection above, the Examiner identifies the nozzle bar as the die, to include the die body and die tip, which is comprised of plates 41 and 42. The die tip has on its downstream end or bottom surface, two slot plates (items 43 and 44). Furthermore, the nozzle bar includes distributor 60, lateral inlet 23, redirecting means 24 between the inlet and the distributor, wherein the lateral inlet and redirecting means are housed in the nozzle bar and as such, there are no feed pipes above the nozzle bar. Thus, the reference of Allen, et al. anticipates claims 18 – 19 as written.

However, claims 2 and 9 – 12 are indicated as allowable, though are rejected because of the dependency of claim 2 upon rejected claim 18. As stated above, the closest prior art reference of Allen, et al. does not teach that the nozzle bar is laterally enclosed by air feed blocks.

Conclusion

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARIA VERONICA D. EWALD whose telephone number is (571)272-8519. The examiner can normally be reached on M-F, 8 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra Gupta can be reached on 571-272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MVE

/Maria Veronica D Ewald/
Examiner, Art Unit 1791